

DATA FOR STORES  
 BULK X8372

# 24/57  
 # 76294  
 06/10/96

12100 Kirk SS Circle  
 Austin TX 78753  
 A. Seils 512/239-2514  
 USEPA (6SF-PA)  
 1445 Ross Ave, #1200  
 Dallas TX 75202-2738  
 B. Rhotenberry 214/1665-7436

2952321330



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**QTXI**

EXP X  
 NAS  
 SDS

Texas Natural Resource Conserv  
 Commission (TNRCC)  
 Pollution Cleanup Division  
 Attn: Mr. Alan Seils (NC-142)  
 P. O. Box 13087  
 Austin, TX 78711-3087

EPA Form 1320-3 (Rev. 3-84)

961829

# BOOKMARK

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 6  
HOUSTON BRANCH  
10625 FALLSTONE ROAD  
HOUSTON, TEXAS 77099

RESUBMITTED DATA REVIEW REPORT

DATE: <u>May 21, 1996</u>	CASE #: <u>24517</u>
<u>*May 30, 1996</u>	SAS #: _____
TO: <u>B. Canellas (6SF-RA)</u>	SDG #: <u>FER94</u>
_____	LAB : <u>AATSLA</u>
FROM: <u>Chris Covington - ESAT</u>	SITE : <u>OLD BRAZOS FORGE</u>
<u>Region 6</u>	PAGE: <u>1 of 2</u>
ESAT#: <u>O-1685</u>	TDF#: <u>6-6246A</u>

EFFECTS OF RESUBMITTED INFORMATION ON THE ORIGINAL DATA:

Laboratory response to CCS request (received 5/20/96):

**Pest/PCB**

1. The original data assessment remains unchanged.
2. The laboratory submitted a corrected Form 7E. Please replace page 693 in the original data package.

**\*Laboratory response to Region 6 request (received 5/22/96):**

A. VOA

1. The laboratory indicated that chromatogram and quantitation report were included in the initial calibration since this continuing calibration is part of the initial calibration.
2. The laboratory did not clarify the discrepancy in the calibration time. Although the "last calibration" time is not required by the contract, the discrepancy is a concern.
3. The laboratory demonstrated the correct use of the surrogate recovery equation from the SOW (OLM03.2, D-43/VOA, 11.2.4.3). The minor discrepancies in calculating the recoveries may be due to rounding errors. The original data assessment remains unchanged.

**CONTINUATION PAGE  
RESUBMISSION REPORT**

CASE 24517 SDG FER94 SITE OLD BRAZOS FORGE LAB AATSLA

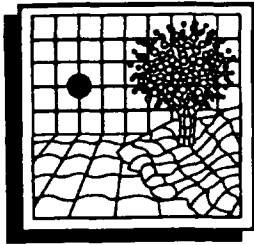
**PAGE 2 of 2**

B. BNA

1. The laboratory did not clarify the discrepancy in the calibration time. Although the "last calibration" time is not required by the contract, the discrepancy is a concern.
2. The laboratory submitted corrected Form I-TIC's and spectra for the peak at 19.17 minutes in samples FER41 and FER98. Please replace pages 288 and 416 and insert pages 297A and 430A in the original data package. The resubmitted disk has been placed in the case folder at Region 6.

C. Pest/PCB

1. The reviewer disagrees with the laboratory's interpretation of the SOW. The data useability remains unaffected.
2. The laboratory did not apply unique suffixes for each PEM, INDA, and INDB in this case although the resubmission claimed otherwise. The original data assessment remains unchanged.
3. The laboratory submitted a corrected Form 7E in response to the CCS request from 5/20/96. Please keep this page as additional data. The resubmitted disk has been placed in case folder at Region 6.
4. The laboratory indicated that in future cases the resolution check results would be reported correctly.



# AMERICAN ANALYTICAL & TECHNICAL SERVICES, INC.

DATE: May 21, 1996  
TO: Ms Christy Macdowell, Region VI, USEPA  
FROM: Russell McNiece, GC/MS Supervisor, AATSLA  
SUBJECT: Case 24517, SDG FER94

Enclosed is the laboratory's response to a fax from Chris Covington of 16 May, 1996 (a copy of which is enclosed for your reference) concerning the above mentioned case.

A. VOA

1. The continuing calibration for HP1 on 03/31/96 at 07:51 (file B2865) was part of the initial calibration. A Form VII was submitted which showed that the VSTD050 passed all criteria for use as a continuing calibration. The chromatogram and quantitation report are included as part of the initial calibration.
2. The "last calibration" time on the sample quantitation reports is not required. The "Date Acquired" matches the date and time as shown on the Form V.
3. The SMC recovery calculations are demonstrated using sample FER34 (file B2854) as an example:

D <sub>4</sub> -1,2-Dichloroethane area	188315
Bromochloroethane (internal standard) area	160001
D <sub>4</sub> -1,2-Dichloroethane RRF from continuing calibration (file B2831)	1.440

$188315 \div 160001 \times 50 \div 1.440 = 40.87 = 81.74\%$  recovery

82% recovery was reported on Form II.

B. BNA

1. The "last calibration" time on the sample quantitation reports is not required. The "Date Acquired" matches the date and time as shown on the Form V.
2. Enclosed are the requested library searches and the corrected Form IF's. A corrected Agency Standard disk is also enclosed.

C. PEST/PCB

1. No forms 6H, 6I, or 6J are required for the indicated standards as these are not part of the initial calibration (OLM03.1 SOW, page B-50, Section 3.12).
2. The standards are uniquely identified by applying different suffixes (2F, F2, etc.).
3. Corrected Form 7E and corrected Agency Standard disk is submitted.

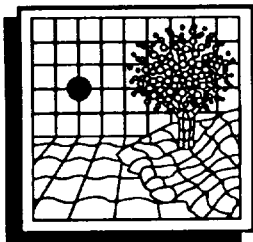
Ms Christy Macdowell  
May 21, 1996  
- Page 2 -

4. Resolution Check results will be provided on one Form VI-PEST-4 in the future (where only two initial calibrations were used).

Should you have any questions or require additional information, please feel free to call me at (504) 753-8650.

RDM:vlj

Enclosures



# AMERICAN ANALYTICAL & TECHNICAL SERVICES, INC.

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2. Enclosed are the requested library searches and the corrected Form IF's. A corrected Agency Standard disk is also enclosed.

C. PEST/PCB

1. No forms 6H, 6I, or 6J are required for the indicated standards as these are not part of the initial calibration (OLM03.1 SOW, page B-50, Section 3.12).
2. The standards are uniquely identified by applying different suffixes (2F, F2, etc.).
3. Corrected Form 7E and corrected Agency Standard disk is submitted.

Ms Christy Macdowell  
May 21, 1996  
- Page 2 -

4. Resolution Check results will **be** provided on one Form VI-PEST-4 in the future (where only two initial **calibrations** were used).

Should you have any questions or **require** additional information, please feel free to call me at (504) 753-8650.

RDM:vlj

Enclosures

**Lockheed Martin Environmental Systems and Technology  
ESAT Region 6**

1200 Smith Street, Suite 800, Houston, TX 77002 Tel: (713) 654-4843

**FACSIMILE COVER SHEET**

**Please deliver the following pages to:**

**Name** Dr. Bagawandoss

**Firm** AATSLA

**City** Baton Rouge **State** LA

**Telephone** (504) 753-8650 **Ext.**

**Fax Telephone No.** (504) 751-1405 **Ext.**

**Sender:**

**Name** Chris Covington

**Date** May 15, 1996

**Total Number of pages including this Cover Sheet** 3

**If you do not receive all the pages or if any pages are unclear,  
please call: (713) 654-4843**

**MESSAGES:** Resubmission request for Case 24517 SDG: FER94 (O-1685)

Fax Model No. Xerox Telecopier 7033, Fax No. 713-654-4852

In Reference to Case No(s):  
24517 SDG: FER94 (O-1685)

**Contract Laboratory Program  
REGIONAL/LABORATORY COMMUNICATION SYSTEM  
FAX Record Log**

**Date of FAX:** May 15, 1996  
**Laboratory Name:** AATSLA  
**Lab Contact:** Dr. Bagawandoss

**Region:** 6  
**Regional Contact:** Chris Covington - ESAT

**FAX initiated by:**        Laboratory   X   Region

**In reference to data for the following fractions:**

VOA            BNA            PEST/PCB

**Summary of Questions/Issues:**

**A. VOA**

1. Continuing Calibration (HP1, 3/31/96, 07:51, file B2865): Please submit the chromatogram and quantitation report for this calibration which were omitted from the data package.
2. Please explain why the "last calibration" time on the sample quantitation reports does not match that of the associated calibration listed on Forms 5 and 7.
3. Please demonstrate the SMC recovery calculation used for all samples. Please verify that this calculation matches the equation in the SOW (OLM03.2, D-43/VOA, 11.2.4.3). Submit corrected forms and raw data if necessary.

**B. BNA**

1. Please explain why the "last calibration" time on the sample quantitation reports does not match that of the associated calibration listed on Forms 5 and 7.
2. Samples FER41 and FER98: The laboratory did not identify the peak at approximately 19.17 minutes as a target compound, TIC, or alkane for these samples. Please submit corrected Form I's and supporting data as necessary.

**FAX COMMUNICATION LOG**

Continuation Page 2  
Laboratory/Contact AATSLA/Dr. Bagawandoss  
In Reference To Case No. 24517 SDG: FER94

**C. PEST/PCB**

1. Forms 6H, I and J: Please submit the following required forms that were omitted from the data package.

Form 6H - PEM3F and PEM4F for instrument HP-3F  
          PEM3F for instrument HP-2F

Form 6I - INDAM2F and INDAM3F for both instruments

Form 6J - INDBM2F and INDBM3F for both instruments

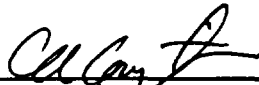
2. When simultaneous injections are not used, the laboratory is to apply different suffixes to identify the PEM, INDA, or INDB standards. This applies to Forms 6 (G, H, I, and J), 7 (D and E) and 8D and the associated raw data (OLM03.2, B-35, 3.3.7.7). Please correct for future cases.
3. Form 7E INDAMF2 (pg. 693, instrument HP2F, 18:42): Form 7E has a reporting error for the TCX calculated amount which made the %D appear to have failed the QC criteria. Please submit a corrected Form 7E.
4. For future cases, please submit the resolution check solution results on one Form VI Pest-4 as requested in the SOW (OLM03.2, B-51, 3.12.3).

**NOTE:** Any laboratory resubmission should be submitted either as an addendum to the original CSF with a revised Form DC-2 or submitted as a new CSF with a new Form DC-2 (OLM03.0, p. B-29), except those containing only replacement pages. Custody seals are required for all CSF resubmission shipments.

Please respond to the above items. Region 6 resubmissions may be included with CCS response or sent separately within 7 days to:

Ms. Christy Macdowell  
U.S. EPA Region 6 Laboratory  
10625 Fallstone Road  
Houston, TX 77099

If you have any questions, please contact me at (713) 654-4843.

  
\_\_\_\_\_  
Signature

5-15-96  
\_\_\_\_\_  
Date

**Distribution: (1) Lab Copy (2) Region Copy**

1F  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

000288-12/1/96  
EPA SAMPLE NO.

FER41

Name: AATSLA Contract: 68-D5-0023  
Lab Code: AATSLA Case No.: 24517 SAS No.: \_\_\_\_\_ SDG No.: FER94  
Matrix: (soil/water) SOIL Lab Sample ID: 1542705  
Sample wt/vol: 30.0 (g/mL) G Lab File ID: 77442  
Level: (low/med) LOW Date Received: 03/29/96  
% Moisture: 14 decanted: (Y/N) N Date Extracted: 03/30/96  
Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 04/05/96  
Injection Volume: 2.0 (uL) Dilution Factor: 0.5  
GPC Cleanup: (Y/N) Y pH: 7.6

Number TICs found: 7

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Aldol condensation	3.38	200	ABJ
2.	Aldol condensation	4.77	170	ABJ
3.	Aldol condensation	5.50	320	ABJ
4.	Aldol condensation	5.77	110	AJ
5.	Unknown	13.78	140	J
6.	Unknown	15.08	860	J
7.	Unknown	19.17	780	J

000297A  
✓ 5/21/96

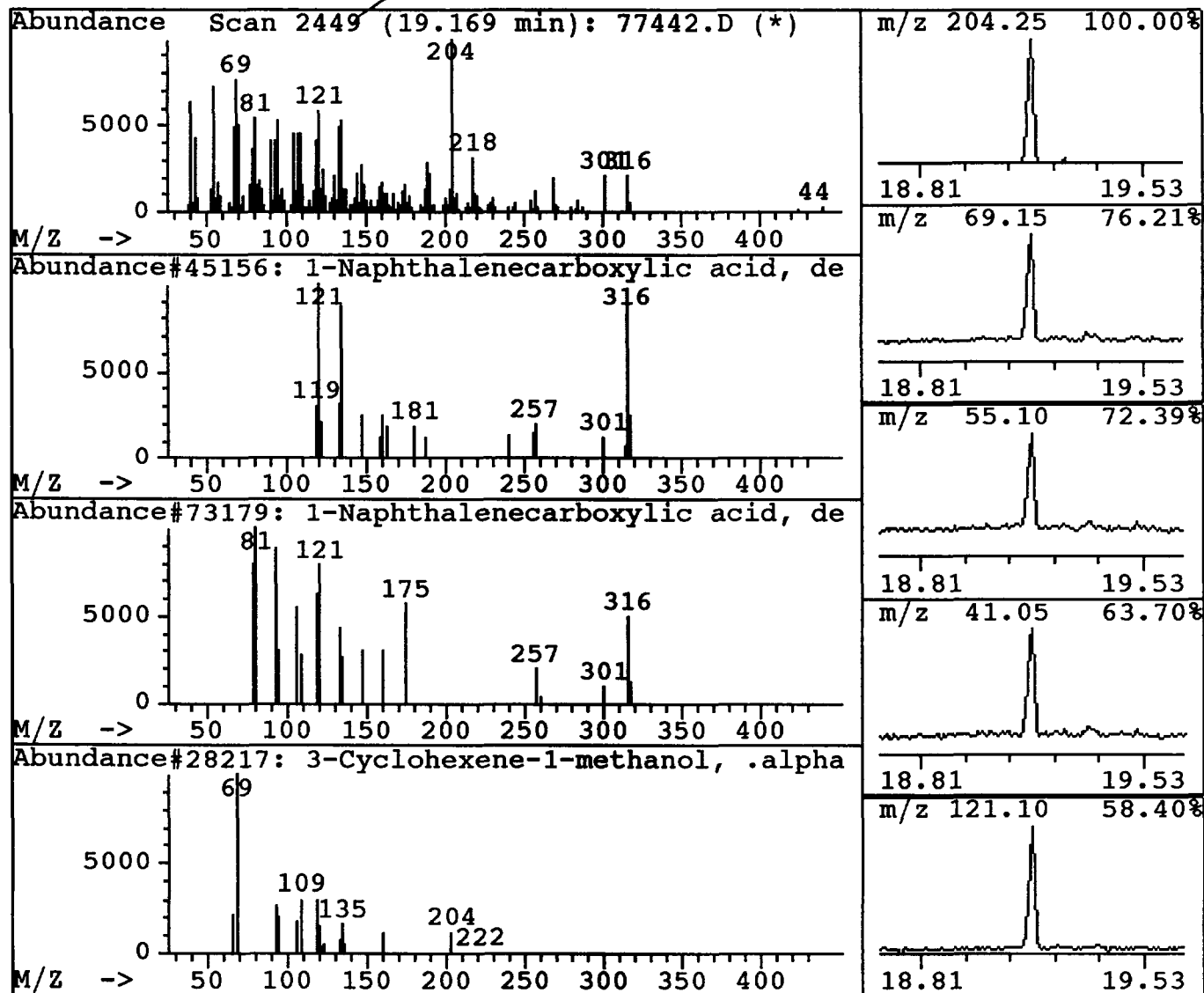
Tentatively Identified Compound (LSC)

Operator ID: AK      Date Acquired: 5 Apr 96 17:32  
 Data File: C:\CHEMPC\DATA\040596\77442.D  
 Name: FER41      EXT033096  
 Misc: HP6\*USEPA\*15427.05\*30.00g/0.5ml/2uLL\*MS517  
 Method: OLMO3\_1.M      Inst: HP6  
 Title: AATS-BR SEMIVOLATILE CALIBRATION FILE  
 Last Calibration: Fri May 17 08:22:44 1996

Library Searched: nbs75k.L

R.T.	Conc	Area	Relative to ISTD	ISTD Area
17.70	40.00 ug/mL	1989034	CI75 Perylene-d12	79051

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Naphthalenecarboxylic acid, decah	45156	001235-39-8	72
2	1-Naphthalenecarboxylic acid, decah	73179	015798-13-7	50
3	3-Cyclohexene-1-methanol, alpha.,4	28217	023178-88-3	49
4	Naphthalene, 1,2,3,5,6,7,8,8a-octah	69888	004630-07-3	46
5	Tricyclo[4.3.0.07,9]nonane, 2,2,5,5	24461	054832-82-5	43



1F  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

000 416 7/21/96  
EPA SAMPLE NO.

FER98

Name: AATSLA Contract: 68-D5-0023

Lab Code: AATSLA Case No.: 24517 SAS No.: \_\_\_\_\_ SDG No.: FER94

Matrix: (soil/water) SOIL Lab Sample ID: 1541105

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 77428

Level: (low/med) LOW Date Received: 03/28/96

% Moisture: 15 decanted: (Y/N) N Date Extracted: 03/30/96

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 04/05/96

Injection Volume: 2.0 (uL) Dilution Factor: 0.5

GPC Cleanup: (Y/N) Y pH: 8.1

Number TICs found: 12

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Aldol condensation	3.20	130	AJ
2.	Aldol condensation	3.37	460	ABJ
3.	Aldol condensation	4.77	280	ABJ
4.	Aldol condensation	5.50	420	ABJ
5.	Aldol condensation	5.77	110	AJ
6.	Unknown	6.15	160	J
7.	Unknown	7.20	780	J
8.	Unknown	10.77	87	J
9.	Unknown	12.48	180	J
10.	Unknown	15.07	210	J
11.	Unknown	18.27	120	J
12.	Unknown	19.13	330	J

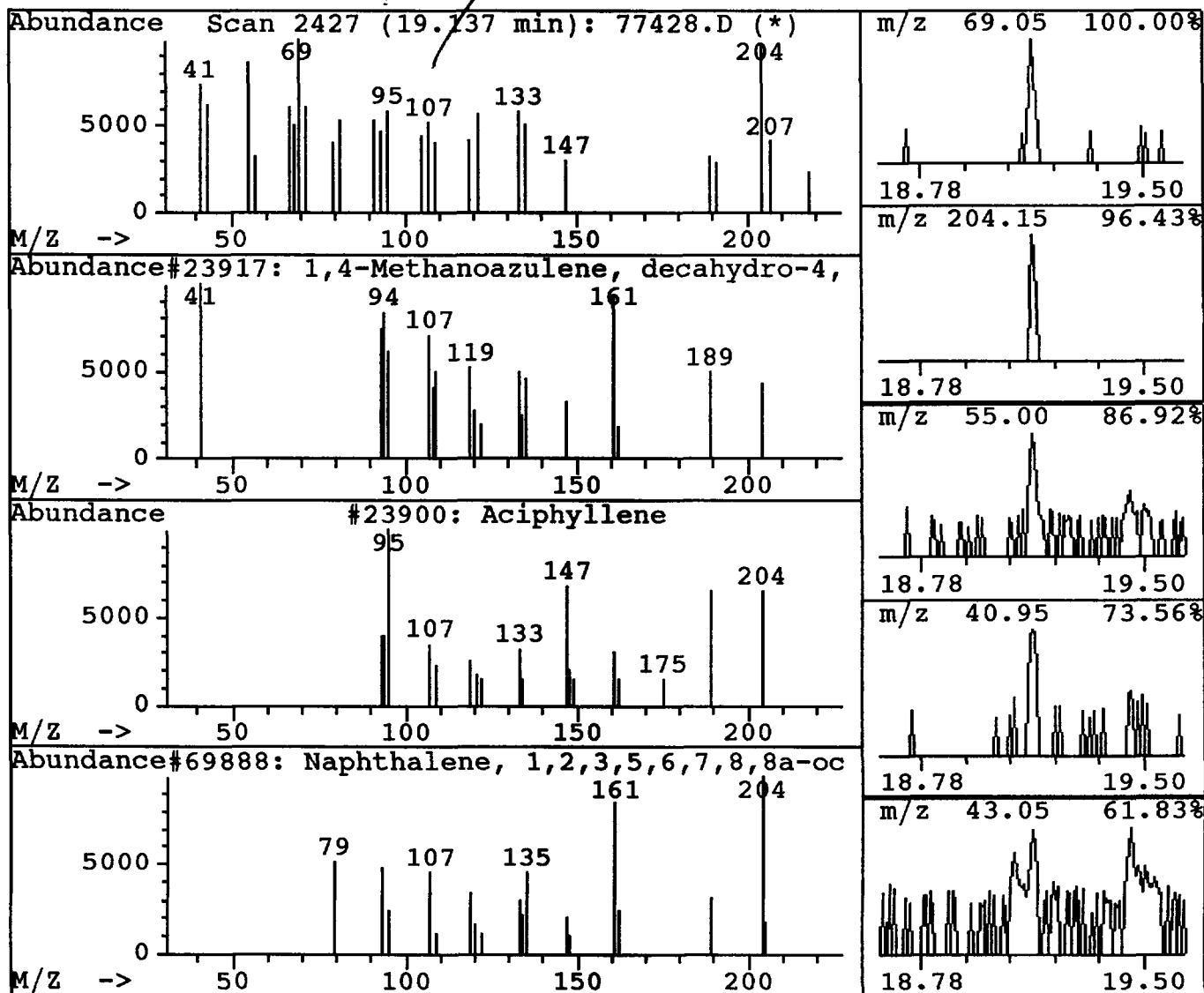
## Tentatively Identified Compound (LSC)

Operator ID: AK Date Acquired: 5 Apr 96 00:57  
Data File: C:\CHEMPC\DATA\040496\77428.D  
Name: FER98 EXT033096  
Misc: HP6\*USEPA\*15411.05\*30.00gml/0.5ml/2uLL\*MS517  
Method: OLMO3\_1.M Inst: HP6  
Title: AATS-BR SEMIVOLATILE CALIBRATION FILE  
Last Calibration: Fri May 17 08:22:44 1996

Library Searched: nbs75k.L

R.T.	Conc	Area	Relative to ISTD	ISTD Area
19.14	16.82 ug/mL	56366	CI75 Perylene-d12	65235

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1,4-Methanoazulene, decahydro-4,8,8	23917	000475-20-7	62
2	Aciphyllene	23900	087745-31-1	38
3	Naphthalene, 1,2,3,5,6,7,8,8a-octah	69888	004630-07-3	38
4	Cyclopropa[d]naphthalen-2(4H)-one,	23869	004677-90-1	37
5	Cyclohexanol, 3-ethenyl-3-methyl-2-	36654	069350-63-6	35



7E  
PESTICIDE CALIBRATION VERIFICATION SUMMARY

000693  
Corrected  
nt 5/17/96

Lab Name: AATSLA Contract: 68-D5-0023  
Lab Code: AATSLA Case No.: 24517 SAS No.: SDG No.: FER94  
GC Column: DB-1701 ID: 0.53(mm) Init. Calib. Date(s): 04/23/96 04/24/96  
EPA Sample No. (PIBLK): PIBLK F2 Date Analyzed : 04/24/96  
Lab Sample ID (PIBLK): EPA1-7-AF2 Time Analyzed : 1725  
EPA Sample No. (INDA): INDAMF2 Date Analyzed : 04/24/96  
Lab Sample ID (INDA): EPA1-12-AF2 Time Analyzed : 1842

INDIVIDUAL MIX A COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
alpha-BHC	6.32	6.27	6.37	0.0408	0.0400	2.0
gamma-BHC (Lindane)	7.14	7.08	7.18	0.0409	0.0400	2.2
Heptachlor	7.62	7.56	7.66	0.0411	0.0400	2.8
Endosulfan I	11.44	11.37	11.51	0.0427	0.0400	6.8
Dieldrin	13.18	13.10	13.24	0.0826	0.0800	3.2
Endrin	14.31	14.22	14.36	0.0841	0.0800	5.1
4,4'-DDD	17.47	17.39	17.53	0.0828	0.0800	3.5
4,4'-DDT	18.92	18.82	18.96	0.0855	0.0800	6.9
Methoxychlor	24.74	24.66	24.80	0.418	0.400	4.5
Tetrachloro-m-xylene	4.51	4.46	4.56	0.0403	0.0400	0.8
Decachlorobiphenyl	29.68	29.57	29.77	0.0844	0.0800	5.5

EPA Sample No. (INDB): INDBMF2 Date Analyzed : 04/24/96  
Lab Sample ID (INDB): EPA1-16-AF2 Time Analyzed : 1958

INDIVIDUAL MIX B COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
beta-BHC	8.88	8.84	8.94	0.0427	0.0400	6.8
delta-BHC	9.68	9.63	9.73	0.0439	0.0400	9.8
Aldrin	8.28	8.24	8.34	0.0428	0.0400	7.0
Heptachlor epoxide	10.34	10.28	10.42	0.0430	0.0400	7.5
4,4'-DDE	12.38	12.32	12.46	0.0854	0.0800	6.8
Endosulfan II	17.66	17.60	17.74	0.0886	0.0800	10.8
Endosulfan sulfate	24.19	24.13	24.27	0.0875	0.0800	9.4
Endrin ketone	26.23	26.17	26.31	0.0898	0.0800	12.2
Endrin aldehyde	21.43	21.37	21.51	0.0759	0.0800	-5.1
alpha-Chlordane	11.89	11.83	11.97	0.0435	0.0400	8.8
gamma-Chlordane	11.64	11.58	11.72	0.0435	0.0400	8.8
Tetrachloro-m-xylene	4.49	4.46	4.56	0.0401	0.0400	0.2
Decachlorobiphenyl	29.66	29.57	29.77	0.0796	0.0800	-0.5